

AMENDMENTS TO THE CLAIMS

Claims 1-14 (Canceled)

Claim 15 (Currently Amended): A perpendicular magnetic recording medium comprising:

a substrate;

a nonmagnetic underlayer formed on the substrate, and containing at least one element selected from the group A consisting of Pt, Pd, Rh, Ag, Au and Ir, and at least one element or compound selected from the group B consisting of C, Ta, Mo, W, Nb, Zr, Hf, V, Mg, Al, Zn, Sn, In, Bi, Pb, Cd, SiO<sub>2</sub>, MgO, Al<sub>2</sub>O<sub>3</sub>, TaC, TiC, TaN, TiN, B<sub>2</sub>O<sub>3</sub>, ZrO<sub>2</sub>, In<sub>2</sub>O<sub>3</sub> and SnO<sub>2</sub>; and

a magnetic layer formed directly on the underlayer, containing at least one element selected from the group consisting of Fe, Co and Ni, and at least one element selected from the group consisting of Pt, Pd, Au and Ir, and containing crystal grains having an L1<sub>0</sub> structure, wherein

the medium further comprises a crystal orientation layer between the substrate and the underlayer.

Claim 16 (Previously Presented): The medium according to claim 15, wherein the crystal grains having the L1<sub>0</sub> structure in the magnetic layer are mainly {001}-oriented.

Claim 17 (Previously Presented): The medium according to claim 15, wherein crystal grains in the underlayer are mainly {100}-oriented.

Claim 18 (Previously Presented): The medium according to claim 15, wherein the underlayer contains at least one element or compound selected from the group B within a range from 0.1 mol% to 50 mol%.

Claim 19 (Previously Presented): The medium according to claim 15, wherein the magnetic layer contains at least one element or compound selected from the group B.

Claim 20 (Previously Presented): The medium according to claim 19, wherein the magnetic layer contains at least one element or compound selected from the group B within a range from 0.1 mol% to 40 mol%.

Claim 21 (Canceled)

Claim 22 (Currently Amended): The medium according to claim ~~21~~ 15, wherein the crystal orientation layer contains Cr and at least one element selected from the group C consisting of Ti, Ni, Co, Cu and Zn.

Claim 23 (Previously Presented): A medium according to claim 22, wherein the crystal orientation layer contains at least one element selected from the group C within a range from 0.1 mol% to 50 mol%.

Claim 24 (Currently Amended): The medium according to claim ~~21~~ 15, further comprising a seed layer between the substrate and the crystal orientation layer.

Claim 25 (Previously Presented): The medium according to claim 15, wherein the magnetic layer has a thickness of 200 nm or less.

Claim 26 (Previously Presented): The medium according to claim 25, wherein the magnetic layer has a thickness ranging from 0.5 nm to 50 nm.

Claim 27 (Previously Presented): The medium according to claim 15, further comprising a protective layer on the magnetic layer.